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| 10/525,962                    | 02/28/2005  | Amit Cohen           | P-5283-US           | 3145             |
| 49443                         | 7590        | 12/05/2008           |                     |                  |
| Pearl Cohen Zedek Latzer, LLP |             |                      | EXAMINER            |                  |
| 1500 Broadway                 |             |                      | ZHANG, FAN          |                  |
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| New York, NY 10036            |             |                      | ART UNIT            | PAPER NUMBER     |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/525,962 | <b>Applicant(s)</b><br>COHEN ET AL. |  |
|                              | <b>Examiner</b><br>FAN ZHANG         | <b>Art Unit</b><br>2625             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Supplemental Action***

1. The following supplemental office action in terms of 35 U.S.C. 101 rejections is in view of Applicant's claims received on August 15, 2005 and composed in combining with the original office action mailed on August 28, 2008.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 1-16, 19, and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Regarding claims 1-16, 19, and 20, the claims do not comply with the current standards for patent eligible subject matter under 35 USC § 101. The first step in determining whether a claim recites patent eligible subject matter is to determine whether the claim falls within one of the four statutory categories of invention recited in 35 USC § 101: process, machine, manufacture and composition of matter. Claims 1-16, 19, and 20 of the pending application fall under the statutory category of a "process." For the purpose of § 101, a "process" has been given a specialized, limited meaning by the courts.

A § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to

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a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101. Claims 1-16, 19, and 20 are not tied to another statutory class nor do they transfer underlying subject matters to different states or things.

Thus, to qualify as a § 101 statutory process, a claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

For further explanation, see MPEP § 2106 IV.B.I. and the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility on the uspto.gov website:

([http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claims 1, 2, 8-11, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burch et al (US Patent: 6,088,708) and in further view of Aizikowitz et al (US Patent: 6,476,931).**

**Regarding claim 1**, Burch et al teach: A method of creating an output document based on an input document having a visual appearance corresponding to a plurality of elements, each element being characterized at least by a geometry [col 3: lines 16-37, col 15: lines 6-19, fig. 2], the method comprising: creating at least one composite element in said output document to represent at least two elements in said input document if creating said composite element is desirable [figs. 3 and 4, col 11: lines 35-67, col 12: lines 1-7]. Burch et al do not emphasize on z-axis value of each element although the feature is inherently expressed as illustrated in figs. 2-4 for indication on overlapping sequence of each element. In the same field of endeavor, Aizikowitz et al teach: each element being characterized at least by a z-axis value and a geometry and altering z-axis values of said at least two elements if creating said composite element is not desirable and if said at least two elements do not overlap [fig. 3B, col 7: lines 58-67]. In Aizikowitz et al's teaching, z-axis values are the same for elements that stay on the same layer and do not overlap. Although z-axis values for elements in the claimed invention are different from each other, they have no significant difference for those elements that do not overlap as prescribed by Applicant in [p0026: lines 17-19]. In other words, altering the same z-axis values for non-overlapping elements in Aizikowitz et al's teaching produces the same result on the final appearance of the page as altering the different z-axis values for non-overlapping elements in claimed invention. Therefore,

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given Aizikowitz et al's prescription, it would have been obvious for an ordinary skilled in the art to modifying Burch et al's teaching to include z-axis value for each element in an output page for clearly indicating their corresponding overlapping order and eliminating confusion.

**Regarding claim 2**, the rationale applied to the rejection of claim 1 has been incorporated herein. Burch et al further teach: The method of claim 1, wherein said plurality of elements are characterized by a coverage area and wherein determining if creating said composite element is desirable includes calculating a coverage area of said composite element [col 16: lines 61-67, col 17, 1-30, col 20: lines 60-65, col 21: lines 27-46].

**Regarding claim 8**, the rationale applied to the rejection of claim 1 has been incorporated herein. Burch et al further teach: The method of claim 1 wherein said plurality of elements are characterized by coverage areas corresponding to polygons enclosing said elements, respectively [figs. 3-5].

**Regarding claim 9**, the rationale applied to the rejection of claim 8 has been incorporated herein. Burch et al further teach: The method of claim 8, wherein said altering z-axis values of said at least two elements if creating said composite element is not desirable and if said at least two elements do not overlap comprises determining whether polygons enclosing said at least two elements overlap [col 11: lines 35-67].

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Aizikowitz et al also determine whether elements overlap in [col 7: lines 58-67].

**Regarding claim 10**, the rationale applied to the rejection of claim 8 has been incorporated herein. Burch et al further teach: The method of claim 8, wherein said polygons are rectangles [figs. 3-5].

**Regarding claim 11**, the rationale applied to the rejection of claim 9 has been incorporated herein. Burch et al further teach: The method of claim 9 wherein said polygons are rectangles [fig. 3-5].

**Regarding claims 14 and 15**, the rationale applied to the rejection of claim 1 has been incorporated herein. Aizikowitz et al further teach: The method of claim 1, wherein said input/output variable print document has a format selected from the set consisting of VPS, PPML and ANSI CGATS 2.0 (PPML/VDX) [col 4: lines 42-67].

**Regarding claim 16**, the rationale applied to the rejection of claim 15 has been incorporated herein. Claim 16 has been analyzed and rejected with regard to claim 14.

**Claim 17** has been analyzed and rejected with regard to claim 1 and in accordance with Burch et al's further teaching on: Apparatus comprising: means for receiving an input document [fig. 1: units 32-34] and a processor to create an output

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document [fig. 1: unit 21].

**Claim 18** has been analyzed and rejected with regard to claim 1 and in accordance with Burch et al's further teaching on a program storage device [fig. 1: units 24, 25].

**Regarding claims 19 and 20**, the rationale applied to the rejection of claim 1 has been incorporated herein. Aizikowitz et al further teach: The method of claim 1, wherein said input/output document is a variable print document [col 1: lines 7-10, col 4: lines 57-67].

**6. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burch et al (US Patent: 6,088,708) and Aizikowitz et al (US Patent: 6,476,931); and in further view of Burgess et al (US Patent: 7,110,137).**

**Regarding claim 3**, the rationale applied to the rejection of claim 1 has been incorporated herein. Burch et al and Aizikowitz et al are silent about comparing coverage area of composite element to the sum. In the same field of endeavor, Burgess et al teach: The method of claim 1, wherein said determining if creating said composite element is desirable includes comparing said coverage area of said composite element to the sum of said coverage areas of said at least two elements in said input document [col 10: lines 21-25]. Comparing the combined element area and the sum of individual elements has been well practiced in the art as prescribed by



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Burgess et al. Therefore, it would have been obvious for an ordinary skilled in the art to combine the teaching of Burch et al, Aizikowitz et al, and Burgess et al to compare the combined element area to the sum of individual elements for regulating the coverage area of the composite element for saving output space.

**Regarding claim 5**, the rationale applied to the rejection of claim 1 has been incorporated herein. Burch et al and Aizikowitz et al do not calculate the ratio of composite element area to the sum of individual elements. In the same field of endeavor, Burgess et al teach: The method of claim 1, wherein said plurality of elements are characterized by a coverage area and wherein said determining if creating said composite element is desirable includes determining whether a coverage area of said composite element divided by a sum of coverage areas of said at least two elements is less than a predetermined coverage area reduction parameter [col 10: lines 21-25]. Comparing the ratio between combined element area and the sum of individual elements to a predetermined value has been well practiced in the art as prescribed by Burgess et al. Therefore, it would have been obvious for an ordinary skilled in the art to combine the teaching of Burch et al, Aizikowitz et al, and Burgess et al to compare the ratio between combined element area and the sum of individual elements to a predetermined threshold value for regulating the coverage area of the composite element for saving output space.

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**7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burch et al (US Patent: 6,088,708) and Aizikowitz et al (US Patent: 6,476,931); and in further view of Knowlton et al (US Patent: 6,052,486).**

Regarding claim 4, Burch et al suggest comparing coverage area of composite element to a max area which is determined by the total coverage region of individual elements in [fig. 8]. In the same field of endeavor, Knowlton et al teach: The method of claim 1, wherein said plurality of elements are characterized by a coverage area and wherein said determining if creating said composite element is desirable includes determining whether creating said composite element in said output document results in exceeding a predetermined maximum total coverage area [fig. 1D, col 15: lines 16-29, col 23, lines 45-65]. Comparing a coverage area with multiple elements to a predetermined maximum value has been well known as prescribed by both Burch et al and Knowlton et al as indicated above. Therefore, it would have been obvious for an ordinary skilled in the art to combine the teaching of Burch et al, Aizikowitz et al, and Knowlton et al to compare a coverage area with multiple elements to a predetermined maximum value for determining the acceptance of the coverage area for obtaining best area arrangement.

**8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burch et al (US Patent: 6,088,708) and Aizikowitz et al (US Patent: 6,476,931); and in further view of Ueda et al (US Patent: 6,008,812).**

Regarding claim 6, the rationale applied to the rejection of claim 1 has been

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incorporated herein. Burch et al and Aizikowitz et al do not differentiate elements by type. In the same field of endeavor, Ueda et al teach: The method of claim 1 wherein said plurality of elements are characterized by a type and wherein said determining if creating said composite element is desirable includes determining whether types of said at least two elements are compatible [col 16: lines 40-65]. Grouping elements with compatible type has been well known and practiced in the art as prescribed by Ueda et al. Therefore, it would have been obvious for an ordinary skilled in the art to combine the teaching of Burch et al, Aizikowitz et al, and Ueda et al to group elements based on type for easy classification and differentiation.

**9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burch et al (US Patent: 6,088,708), Aizikowitz et al (US Patent: 6,476,931), and Ueda et al (US Patent: 6,008,812); and in further view of Pentecost et al (US Patent: 6,919,967).**

**Regarding claim 7**, the rationale applied to the rejection of claim 6 has been incorporated here. Burch et al, Aizikowitz et al, and Ueda et al do not specify data type to be fixed or variable. In the same field of endeavor, Pentecost et al teach: The method of claim 6, wherein said type is selected from the set consisting of fixed, reusable and unique [Abstract, col 6: lines 65-57, col 7: lines 1-16]. Therefore, it would have been obvious for an ordinary skilled in the art to combine the teaching of all to separate printing data based on types of fixed, variable, and unique for improving efficiency of rasterizing process.

**10. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burch et al (US Patent: 6,088,708) and Aizikowitz et al (US Patent: 6,476,931); and in further view of Kaasila et al (US Pub: 2003/0095135).**

**Regarding claim 12**, the rationale applied to the rejection of claim 1 has been incorporated herein. Aizikowitz et al prescribe raster image processing in [fig. 5] although do not characterize coverage area of an element corresponding to bitmap. In the same field of endeavor, Kaasila et al teach: The method of claim 1, wherein said plurality of elements are characterized by coverage areas corresponding to bitmap masks of said elements [Abstract, p1145, p1190]. Therefore, it would have been obvious for an ordinary skilled in the art to combine the teaching of Burch et al, Aizikowitz et al, and Kaasila et al to characterize coverage area using bitmap as an alternative way for determining the size of any shape.

**Regarding claim 13**, the rationale applied to the rejection of claim 12 has been incorporated herein. Kaasila et al further teach: The method of claim 12, wherein said altering z-axis values of said at least two elements if creating said composite element is not desirable and if said at least two elements do not overlap comprises determining whether said coverage areas corresponding to bitmap masks of said at least two elements overlap [p1058, p1087, p1451].

***Contact***

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fan Zhang whose telephone number is (571) 270-3751. The examiner can normally be reached on Mon-Fri from 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fan Zhang/

Patent Examiner

/Mark K Zimmerman/

Supervisory Patent Examiner, Art Unit 2625